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AUTHOR Wallhaus, Penny; Lach, Ivan J.
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ABSTRACT

Designed for use by community college personnel, this handbook provides information necessary to conduct a study of the impact of a community college on the business volume and other economic aspects of the community. Section I explains models for assessing the following seven types of economic impact: (1) college-related local business volume; (2) value of local business property committed to college-related business; (3) expansion of local banks' credit base; (4) college-related revenues received by local governments; (5) operating costs of government-provided services applicable to college-related influences; (6) number of local jobs attributable to the presence of the college; and (7) personal income of local individuals from college-related jobs and business activities. Directions and questionnaires for surveying college staff and students are provided in section II. Section III lists information needed to complete an economic impact study, and section IV presents a process to calculate economic impact in seven areas. Finally, summary information is provided related to the concept of the multiplier, along with data on the percentage of each county's population enrolled in each community college district, and selected references. (Author/LAL)

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ILLINOIS COMMUNITY COLLEGE BOARD

HANDBOOK
FOR
CONDUCTING A STUDY
OF THE ECONOMIC IMPACT OF
A COMMUNITY COLLEGE

(1981 Revised Edition)

Penny Wallhaus
Associate Director

Ivan J. Lach
Director
Planning & Research

Illinois Community College Board
3085 Stevenson Drive
Springfield, Illinois 62703
Telephone: (217) 786-6000

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HANDBOOK FOR CONDUCTING A STUDY OF THE ECONOMIC
IMPACT OF A COMMUNITY COLLEGE

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Raymond Bess spent a considerable amount of time in implementing a pilot study of the economic impact of these six community colleges and greatly enhanced the work of this special RAC subcommittee. While using this study for his dissertation, he greatly assisted each of the colleges with the study and prepared a report for each school. In addition, a summary report of the results for the six colleges was prepared for the ICCB. This report, entitled "A Study of the Economic Impact of Six Community Colleges in Illinois" (March 1980), is available from the ICCB Office.

PREFACE

This Handbook for Conducting a Study of the Economic Impact of Community Colleges is intended for use by community college personnel who desire to conduct a study of the impact of the community college (as a business enterprise and excluding the educational benefits) on the business volume and other economic aspects of the community. This Handbook provides a brief explanation of the basic rationale for assessing each of the various types of economic impact contained in the manual developed by the American Council on Education (ACE). The seven models included in this Handbook are:

1. College-Related Local Business Volume
2. Value of Local Business Property Committed to College-Related Business
3. Expansion of Local Banks' Credit Base
4. College-Related Revenues Received by Local Governments
5. Operating Costs of Government-Provided Services Applicable to College-Related Influences
6. Number of Local Jobs Attributable to the Presence of the College
7. Personal Income of Local Individuals from College-Related Jobs and Business Activities

This Handbook contains all the necessary information needed to complete an economic impact study in each of the above models including any necessary survey instruments, a description of each of the multipliers that are needed, an explanation of data sources, and an explanation of the calculation of each of the impact equations.

In addition to making this Handbook available for community college personnel, the ICCB staff plans to coordinate the efforts of all of the colleges interested in conducting an economic impact study for a given year. The ICCB staff will provide workshops and periodic meetings to assist community college personnel with this effort throughout the year. It is hoped that a group of community colleges will be conducting the study in each of the next several years. These working groups will assist the college personnel in not only conducting the study but also in reporting the results and in disseminating the highlights to college personnel as well as to the general public.

We hope that this Handbook will be of assistance to community college personnel in conducting needed impact studies of a community college. We believe that data from such studies will be very valuable in articulating the value of a community college to the local community and the state.

Penny Wallhaus
Associate Director
Planning & Research

Ivan J. Lach
Director
Planning & Research

Introduction

In 1971, the American Council of Education published a research model with the expressed purpose of helping colleges and universities study the economic impact of a college's or university's expenditures on its community. This was the culmination of more than two years' work by two economists, John Caffrey and Herbert Isaacs. The model uses generally accepted economic principles and has received wide acceptance by colleges and universities throughout the United States.

The Research Advisory Council of the Illinois Community College Board, through a survey of research needs and priorities of top administrators in Illinois community colleges, identified impact studies as the highest priority research need. As a result of this finding, the Research Advisory Council formed a special subcommittee to develop a procedure for conducting economic impact studies in Illinois community colleges. This Handbook was an outgrowth of the work of the subcommittee and the several community colleges which voluntarily chose to participate in a pilot project using the model.

The ACE model used twelve submodels to gather information and calculate the various kinds of economic impact. Since the model was developed for use by colleges and universities, it contained several areas which were not pertinent to two-year community colleges. One such submodel calculated the economic impact of student housing and fraternities and sororities. Because of the peculiarities of community college district lines and the many different governmental bodies within the district, it was impractical to use some of the submodels. Therefore, the final model which is explained and used in this Handbook includes seven of the twelve submodels in the ACE model.

The research requires the collecting of extensive data from college records, faculty, students, and local and state governments. After the data is collected, a step-by-step procedure using the ACE model is followed to compute the amount of economic impact.

The first section of this Handbook is an explanation of each model to help the researcher have a general understanding of the study.

Section II provides suggested survey forms and procedures to follow.

Section III includes a listing of all information necessary to complete the survey and where the data is found.

Section IV is a step-by-step process to calculate the economic impact in seven different areas.

Section V contains summary information.

The procedures in this Handbook were used in 1979 and 1980 in the study of six community colleges of various size and location in Illinois. It is believed the procedures are practical for most Illinois community colleges; however, this does not preclude that it may be best for some community colleges to adjust part of the study to better suit their needs.

Section I

Annual Estimated Impacts

The following explanations and results are given on a model-by-model basis. There were three major areas studied (business, government, and individuals) with a total of seven submodels used to estimate the economic impact.

Model B-1 COLLEGE-RELATED BUSINESS VOLUME.

This variable includes local expenditures by the college, faculty, staff, and students; purchases locally by local business in support of their college-related business; and local business volume stimulated by college-related income by local individuals other than college employees.

College-Related Local Expenditures are computed from data taken from college business records, and information about faculty-staff expenditures obtained from surveying faculty and staff. Student local expenditures are computed from survey information from students. Full-time student expenditures include meals, transportation, entertainment, textbooks, class supplies, and miscellaneous expenditures. Part-time student expenditures include only transportation, textbooks, and class supplies.

Purchases Locally by Local Businesses in support of their college-related business refers to business caused by college expenditures beyond what would be normal. This was computed using a multiplier. The range of the multiplier suggested by Caffrey and Isaacs is \$.15 to \$.30 per dollar of expenditures by local residents in local businesses. So that the study reflects a conservative estimate, \$.15 should be used as the multiplier.

Local Business Volume stimulated by college-related income refers to expenditures by local individuals (other than faculty, staff, or students) and which were made possible by original expenditures of the college. For example, if the college buys equipment at the local hardware store, it allows the owner of the hardware store to increase his purchases from other merchants. Business is increased at several merchants because of the original expenditure. The multiplier range suggested for this formula is \$.60 to \$.80 per dollar of expenditures by local residents in local business establishments. The \$.60 figure should be used to provide a guard against overestimating.

Model B-2 VALUE OF LOCAL BUSINESS PROPERTY BECAUSE OF COLLEGE-RELATED BUSINESS.

There are two parts to this submodel. One is the value of local business real property committed to college-related business, and the second is the value of local business inventory attributable to college-related business.

Value of Business Real Property is estimated by computing the ratio of the college-related business volume to total business volume, which is estimated from sales taxes collected by the state from each county. This ratio was applied to the assessed value of local business real property which may be obtained from the local assessor's office. By using the ratio of assessed value to real market value, the assessed value can be converted to real or actual values.

Value of Business Inventory committed to college-related business is computed by multiplying the college-related local business volume times a locally used inventory-to-business volume ratio which is provided by Caffrey and Isaacs.

Model B-3 EXPANSION OF THE LOCAL BANKS' CREDIT BASE RESULTING FROM COLLEGE-RELATED DEPOSITS.

Banks are able to make loans because of the money in checking (demand) and savings (time) accounts of people in the community. The Federal Reserve System requires that a minimum amount of deposits be placed in reserves by each bank. According to local banks, they are required to keep on reserve .03 of their time deposits. The requirement on demand deposits varies between .07 and .1175, depending upon the amount of deposits. Banks, in general, do not loan money to the limits established by the Federal Reserve System, keeping more money in reserve than is required. So that estimates are conservative, the study should assume .10 of time deposits and .20 of demand deposits were held in reserve.

The average amount which a college deposits with local banks may be taken from college records while the amounts in deposit by faculty and staff are computed on the basis of average balances of people in the community and the proportion of faculty and staff living in the district. For the computation of deposits attributed to students, only full-time students should be considered.

Model G-1 COLLEGE-RELATED REVENUES RECEIVED BY LOCAL GOVERNMENTS.

This variable includes estimates of college-related taxes, sales tax revenue, motor fuel taxes and income taxes returned to local governments as a result of college-related local purchases, and state and federal aid to local governments allocable to the presence of the college.

College-Related Real-Estate Taxes are the sum of real-estate taxes paid by faculty and staff and real-estate taxes paid to local governments by local businesses for real property allocable to college-related business.

Sales Tax Revenue Paid to Local Governments is computed by multiplying the proportion of population of a county within a college district times the amounts of sales tax returned to each county in the college district. Records of the Illinois Department of Revenue provide sales tax information.

State and Federal Aid to Local Governments includes aid to public schools based upon the number of children of faculty and staff and shared income tax and motor fuel tax funds based upon State of Illinois records.

Model G-2 OPERATING COST OF LOCAL GOVERNMENT-PROVIDED MUNICIPAL AND PUBLIC SCHOOL SERVICES APPLICABLE TO COLLEGE-RELATED INFLUENCES.

The focus of these studies as a whole is upon economic benefits which are a result of the expenditures of the community college. However, as there are additional funds for local governments because of money spent by staff of a college, local governments have increased costs for maintaining public services and providing educational programs created by the increased number of people. This submodel deals with a negative aspect of impact as it considers the costs created by additional people in the community. It includes operating costs of local government-provided municipal services allocable to college-related influences and operating costs of local public schools allocable to college-related persons.

Operating Cost of Government-Provided Municipal Services is computed by multiplying the proportion of college-related people of a county within the college district times the cost of governmental services determined from publications of the Illinois Department of Local Government Affairs.

Operating Cost of Local Public Schools is determined by calculating the average cost of educating a student in the district (from records of the Illinois State Board of Education) and multiplying this amount times the number of children of faculty and staff of the college.

Model I-1 NUMBER OF LOCAL JOBS ATTRIBUTABLE TO THE PRESENCE OF THE COLLEGE.

This variable includes two parts. First is the number of faculty and staff positions with the college. The second is the number of full-time jobs attributable to the total local expenditures which can be associated with the college.

Number of Faculty and Staff Positions is computed by summing the full-time employees and the full-time equivalence of part-time employees of the college. The sum is used as the number of employees at the college.

Number of Jobs Attributable to the College-Related Local Expenditures is computed by totaling the college-related local expenditures and operating costs of local governments and multiplying this total expenditure by .00007, a coefficient representing the number of jobs per dollar expenditure. Caffrey and Isaacs suggest a range from .00007 to .00009; and as in similar situations in this study, the conservative figure should be used.

Model I-2 PERSONAL INCOME OF LOCAL INDIVIDUALS FROM COLLEGE-RELATED
JOBS AND BUSINESS ACTIVITIES.

Two types of personal income are considered. The first is the income of faculty and staff who live in the district and the second results from the jobs attributable to college-related expenditures.

Personal Income of Local Faculty and Staff is computed by multiplying the gross compensation of all faculty and staff by the proportion of them living in the district.

Personal Income of Persons Other than Faculty and Staff attributable to college-related expenditure is computed by multiplying the college-related expenditure by the local figure for payrolls and profits per dollar of local expenditures. The coefficient for this local figure is taken from Caffrey and Isaacs, who suggest a range from \$.50 to \$.60. The coefficient used should be \$.50 to be consistent with the use of other multipliers in this study.

Impact of Federal and State Funds

Federal and state governments have taken an increased interest in education to insure the opportunity for all people to approach their full potential. Both governments have directed much of their efforts to the economically and socially disadvantaged. Since the community colleges had the educational structure to produce helpful programs and often supplied the initial efforts, they were the ideal educational unit to administer a large segment of the governments' efforts. Many community college campuses have programs supported by federal funds to study needs and train vocational workers for the new and expanding areas such as coal technology, health care, gasohol technology, energy conservation, bilingual education, and others. All of these bring money into a district because of the presence of the community college.

The reason these funds are identified separately is that accounting of these funds is often required to be kept under a "restricted fund" category which is not a part of the regular budget. Consequently, in part, they were not included in the seven models used in this study. This section is added to the report to make it more comprehensive and complete.

Also, a large portion of benefits does not go to the college, but goes directly to the student. Included in this group are the Veterans' benefits and Social Security benefits paid to children of deceased or disabled parents. Part of this money, spent for school expenses, is included in the main body of the study. But the balance is expended in the community in various ways.

Section II

Surveying the Staff and Students

One of the more difficult tasks of the economic impact study is to obtain valid information from faculty and students. Several studies at four-year colleges and two-year colleges have shown difficulty in successfully completing surveys of these groups. This difficulty was attributed to questions which requested financial information and to the general laxity of students to complete the questionnaire. To overcome these problems, specific changes were made in the suggested ACE questionnaire and procedures used to collect the forms. Several questions in the survey instrument, which requested financial information, were deleted and students were surveyed in a classroom situation.

Before the survey instruments are circulated, plans should be implemented to inform the faculty and student body of the impending economic impact study. This may be done through activities such as news releases, announcements directly to faculty, and faculty representation on an "Economic Impact Study Committee." It is worthwhile to confer with faculty and union leaders to explain the purpose of the survey and to have their support. Every possible step should be taken to assure the faculty the survey is needed, and it is not an attempt by the administration to extract personal kinds of information. The faculty must also be convinced the survey information is confidential data.

Directions for Surveying College Staff:

1. Survey only full-time college personnel. Part-time personnel may have another job, and information which they give on a questionnaire may be biased. Part-time employees will be included in the study on the basis of staff-years.
2. Inform the staff when the survey instruments will be distributed, so the survey instrument is not a surprise to them. Request that the survey instruments be returned immediately. The questionnaires will take only a few minutes to complete. If they are not returned in three days, send out reminders until you have at least 60 percent of the forms returned.
3. Tabulate the information. After a summary of all information is completed, it will be necessary for answers to some questions to be separated into categories as follows:

Staff Survey - Answers to questions 6, 7, 8, and 9 should be tabulated according to those who live in the district and those who live out of the district. (Answers to question 5 tell if a staff member lives in or out of the district.) Answers to question 8 should also be tabulated according to the type of housing in question 7.

Directions for Surveying Students

It is recommended that students be surveyed while they are in their classes. If the classes are randomly selected from all classes scheduled during a particular term, the sample should be more than adequate.

The procedure is as follows:

1. Take a listing of all courses offered during a term. Then number them from 1 to the final number of courses.
2. Using a table of random numbers, select 10 percent of the total courses. If the total student body is more than 5,000 students, a smaller percentage of classes may be surveyed.
3. Prepare appropriate instructions for teachers of the classes. Teachers should have been informed of this procedure and understand what is taking place. However, remember there will probably be some part-time teachers involved who will need special instructions. The whole process can be completed in ten minutes in the classroom. The instructor should collect the forms and return them to a designated person.
4. Tabulate the information. After a summary of all information has been made, some of the answers need to be tabulated in special categories.

Student Survey - Answers to questions 4, 5, 6, 7, 8, and 9 should be tabulated according to full-time or part-time student status.

Special Note: Normally, community colleges in Illinois have approximately three times as many part-time students enrolled as full-time students. However, do not be surprised if more than half of the students who complete questionnaires are full-time students. This is because a full-time student will be enrolled in more courses than a part-time student. Consequently the chances of a full-time student being surveyed will be much greater than that of a part-time student.

Suggested questionnaires are displayed on the following pages.

COLLEGE STAFF SURVEY

COLLEGE NAME _____

Purpose: The following questions are designed to gather information about spending patterns in our community college area. We ask your cooperation and assure you that all information given by you will remain confidential. Do not sign your name or otherwise identify yourself.

THANK YOU FOR YOUR ASSISTANCE!!

- I. What is your college status? (Check the category representing the area in which you spend the greatest proportion of your time at the college.)
1) _____ Faculty 2) _____ Staff 3) _____ Administration
- II. Are you employed part-time or full-time at the college? (Check one.)
1) _____ Full-time 2) _____ Part-time
- III. What is your age? (Check one.)
1) _____ 24 or under 5) _____ 40-44
2) _____ 25-29 6) _____ 45-49
3) _____ 30-34 7) _____ 50-54
4) _____ 35-39 8) _____ 55 or older
- IV. What is your sex? (Check one.)
1) _____ Female 2) _____ Male
- V.* Do you live in the college district? (Check one.)
1) _____ Yes 2) _____ No
- VI.* How many persons in your household? (Household = you, your husband or wife, and children whom you support.)
Number of persons. _____
1) How many are children under 18? _____
2) How many attend public schools, grades K through 8? _____
3) How many attend public schools, grades 9 through 12? _____
- VII.* In what type of housing do you reside?
1) _____ Rent apartment 3) _____ Own home
2) _____ Rent house 4) _____ Live with parents
5) _____ Other _____
- VIII.* What percent of your monthly income is spent for housing? _____ %
- IX. Monthly rent or mortgage payment for place of residence? Check one. (Home-owners should include insurance and taxes.)
1) _____ Less than \$100 6) _____ \$300 - \$349
2) _____ \$100 - \$149 7) _____ \$350 - \$399
3) _____ \$150 - \$199 8) _____ \$400 - \$449
4) _____ \$200 - \$249 9) _____ \$450 - \$499
5) _____ \$250 - \$299 10) _____ \$500 or more
- X.* Estimate the percent of your income which is spent outside of the college district. _____ %

STUDENT SURVEY

COLLEGE NAME

Purpose: The following questions are designed to gather information about spending patterns in our community college area. We ask your cooperation and assure you that all information given by you will remain confidential. Do not sign your name or otherwise identify yourself.

THANK YOU FOR YOUR ASSISTANCE!!

- I.* What is your college status? (A full-time student is one who is enrolled in 12 or more credit hours.) Check one.
1) ☐ Full-time student
2) ☐ Part-time student
- II. What is your sex? (Check one.)
1) ☐ Female 2) ☐ Male
- III.* Do you live within the college district? (Check one.)
1) ☐ Yes 2) ☐ No
- IV.* In what type of housing do you reside during the school term? (Check one.)
1) ☐ Rent (yourself and/or with others)
2) ☐ Own my own home
3) ☐ Live with parents or relatives
4) ☐ Other (specify): _____
- V. Do you rent a room or apartment especially to be close to college during the school term? (Check one.)
1) ☐ Yes 2) ☐ No
- VI.* What is the approximate amount of money related to college cost that you spend per month in the following categories?
1) Food _____ 4) Books and _____
2) Housing _____ School Expenses _____
3) Transportation _____ 5) Other Expenses _____
- VII.* Do you receive Veterans' benefits? (Check one.)
1) ☐ Yes 2) ☐ No
- VIII.* Do you receive Social Security benefits? (Check one.)
1) ☐ Yes 2) ☐ No
- IX.** Would you be attending another college out of this district if this college was not here? (Check one.)
1) ☐ Yes 2) ☐ No

THANK YOU!!

*Questions which must be included. Other questions are optional.

**This question is important if you want to show the amount of dollars which would be spent out-of-district if the college did not exist.

Section III

Required Data

III-A The following data are needed to calculate the economic impact of the various ACE models.

Data Required	Amount	Source of Data
1. Total college expenditures	\$ _____	End of fiscal year college audit.
2. Percentage of college expenditures spent locally (this does not include salaries; include insurance and benefits if purchased locally)	0. _____	Sample three different months' expenditures of the college and estimate the percent which is spent in the college district.
3. Gross Salaries paid to staff	\$ _____	Taken from business records.
4. Chargebacks paid to other districts	\$ _____	End-of-year audit.
5. Percentage of college staff who live in district	0. _____	College staff survey Question 5.
6. Percentage of staff who rent apartment or home in district	0. _____	College staff survey Question 7.
7. Disposable income of college staff (this is money paid directly to staff and does not include taxes and retirement money)	\$ _____	College business records.
8. Percentage of income spent for housing in district	0. _____	College staff survey Question 8.
9. Percentage of income spent in district by staff living in district	0. _____	100% minus college staff survey Question 10.
10. Percentage of income spent on non-housing costs by staff living in district	0. _____	100% minus Item 8.
11. Percentage of staff who live outside of district	0. _____	College staff survey Question 5.
12. Total college staff-years	_____	College records or RAMP document.

Data Required	Amount	Source of Data
13. Percent of local expenditures by non-local staff spent outside of district	0.	College staff survey - Question #10 broken down by in-district and out-of-district staff (Question #5).
14. Average local expenditure by non-local staff	\$	Estimated by dividing disposable income of staff (#6) by staff years (#11). Then multiply the quotient by percent of local expenditure by non-local people (13).
15. Number of full-time students (Fall 10th day headcount)		College records.
16. Number of part-time students (Fall 10th day headcount)		College records.
17. Average expenditure of full-time student per month	\$	Student survey - Question #6 broken down by full-time and part-time students. For full-time students use only food, transportation, and school expenses. For part-time students use only transportation and school expenses.
18. Average expenditure of part-time student per month	\$	Student survey - Question #6 broken down by full-time and part-time students. For full-time students use only food, transportation, and school expenses. For part-time students use only transportation and school expenses.
19. Total business volume in district	\$	Estimated by multiplying sales tax returned to district area by 100. See Section III-B.
20. Assessed value of local business real property	\$	Illinois Department of Revenue. See Section III-C.
21. Local ratio of assessed value to market value		Illinois Department of Revenue. (Estimates of 27% overall for counties; 40% for industry and commercial)
22. Average balance in time (savings) deposits of college in local banks	\$	College business records - refers to a monthly average for the fiscal year.
23. Average time deposits of staff-years living in district	\$	Call local banks and determine a reasonable average for the community.

Data Required	Amount	Source of Data
24. Total staff-years living in district	_____	Staff years multiplied by the percent of staff living in district - Question 5, staff survey.
25. Average balance in demand (checking) accounts of college in local banks	\$ _____	College business records - refers to a monthly average for the fiscal year.
26. Average demand account of staff-years living in district	\$ _____	Call local banks and determine a reasonable average for the community.
27. Local property tax rate per dollar assessed value	\$ 0. _____	Call county assessors and estimate a reasonable average rate for district.
28. Total sales tax returned to governmental units	\$ _____	See Section III-8.
29. Total federal and State aid to schools in college district	\$ _____	See Section III-0.
30. Average assessed value of home	\$ _____	County Assessors.
31. Number of staff children in local schools	_____	Multiply number of staff-years by the average number of children in K-8 and 9-12. Staff survey - Question 6.
32. Local Government's Operating Budgets	\$ _____	See III-H.
33. Total number of children in schools in district	_____	Illinois State Board of Education.
34. Fuel tax rebate to district governmental units	\$ _____	Illinois Department of Transportation. See Section III-E.
35. Income tax returned to district governmental units	\$ _____	Illinois Department of Local Government Affairs. See Section III-F.
36. Total in staff households	_____	Multiply average number in households by the number of staff years living in district.

Data Required	Amount	Source of Data
37. Total college district population	_____	Local or ICCB population studies.
38. Local budgets from local sources for public schools	\$ _____	Illinois State Board of Education or area Superintendent of schools. See Section III-G.
39. Restricted funds expended not in regular budget	\$ _____	End of year audit.
40. Amount paid directly to veterans	\$ _____	Student Financial Aids or Veterans Offices.
41. Amount paid directly to Social Security recipients	\$ _____	From Financial Aids. (Multiply number of FTE students annualized by \$171. This is the average amount paid to 18 to 21 year olds during 1979.)

III-B Sales Tax Returns

Most of the information needed in this study is available and tabulated by county. However, because community college districts do not conform to county borders, but instead include parts of many counties, it is very difficult to calculate some of the variables. It is first necessary to determine what part of any county data should be included as community college district data. The ICCB staff in 1980 completed a population study of each of the community college districts by county. In this study it was necessary to determine the percent of population of the various counties which was in each community college district. It proved very valuable in the pilot project with the six community colleges to use the percent of population of a county to determine values of some of the variables. For instance, the amount of sales tax returns for a county which should be a part of a community college district is calculated by multiplying the percent of population of a county by the amount of sales tax returned for the whole county. This is done for each of the counties in the community college district. Then the amounts for each county are totaled. The sum of these amounts is the total for the college district.

Procedure for Calculating Sales Tax

1. List the counties in the community college district on the form provided on the next page.
2. In the next column write the percent found in Section V-B for each of the counties.
3. In the next column labeled "Amount of Sales Tax Returned" list the amount of sales tax returned to each county. This information is available from the Illinois Department of Revenue, Springfield.
4. Multiply column 3 by column 2 and record in column 4.
5. Total the numbers in column 4.

FORM FOR CALCULATING SALES TAX

[illegible]

III-C Assessed Value of Local Business Real Property

This will have to be estimated. The county assessor will be of help, and Barbara Moore or Fred Loehrl of the Department of Revenue in Springfield may have data which will be of assistance. From these two sources enough information should be known to estimate the percent of total assessed value of the community college district that is the assessed value of business real property. This percent is then multiplied by the total assessed value of the college district.

III-D Federal and State Aid to Public Schools

Federal and state aid to public schools is listed in a publication entitled "Illinois Public Schools Financial Statistics" which is published by the Illinois State Board of Education, Springfield. This publication lists the federal and state aid by school district. Therefore, the community college districts will need a listing of all public school districts in their college districts (including elementary, secondary, and unit schools).

III-E Fuel Tax Rebates to Local Governments

The Illinois Department of Transportation, Springfield, has a listing of fuel tax rebates by county. Using the same method as suggested in III-B (percentage of each county), find the amount of rebate by county and then total the quantities of the counties.

III-F Income Tax Returned to Local Governments

Local governments receive a percent of the income tax paid by people in their communities. The Illinois Department of Revenue, Springfield, has a listing of this information by county. Using the same method as suggested in III-B (percentage of each county in district) find the amount of income tax returned by the county. Then total the amounts of the counties.

III-G Local Budgets for Public Schools

The budgets for all public school districts in Illinois are listed in the publication "Illinois Public Schools Financial Statistics" published by the Illinois State Board of Education, Springfield. The use of this material requires that the community college have a listing of all public schools, elementary, high school, and unit districts in the community college district. If only part of the public school district is in the college borders, then adjustments should be made.

III-H Local Governments' Operating Budgets

It is too difficult to seek out each governing body in a community college district since it includes village governments, sewer districts, township boards, county boards, fire districts, etc. Therefore, it is recommended that this be estimated in the following way:

1. Estimate a tax rate that is reasonable for the college district. It should be representative of the various total tax rates in the community college district.
2. Estimate a tax rate that is representative of all public school districts in the community college district.
3. Subtract the estimated public school rate from the estimated total rate. The result is the estimated rate of taxation for all governing services except schools. (School costs are computed in another submodel.)
4. Multiply the rate of taxation for governing bodies times the total assessed value of the community college district. The product will be the amount of local governments' operating budgets.

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Section IV

Computation Models

Directions: Complete each of the models with data from Section III-A or as directed in the model.

Model B-1.1.1 Local Expenditures by College

	(a) Percentage of total college spending locally	(b) Total college expenditures	(c) Gross expended for college staff salaries	(d) Chargebacks paid to other districts
1.1.1 =		(	-	-)
(a) =	0.			
(b) =	\$			(1)
(c) =	\$			(3)
(d) =	\$			(4)
1.1.1 =	0.	(\$	- \$	- \$)
	= \$			

Model B-1.1.2.1 Expenditures by Faculty and Staff Living in District
for Local Rental Housing

	(a) Percentage of college staff living locally	X	(b) Percentage of college staff who rent	X	(c) Total disposable income of college staff	X	(d) Percentage of staff's total expenditure spent on rental housing
1.1.2.1 =							
(a) =	0.						(5)
(b) =	0.						(6)
(c) =	\$						(7)
(d) =	0.						(8)
1.1.2.1 =	\$						

*Refers to numbered data in Section III-A

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Model B-1.1.2.2 Local Nonhousing Expenditures by Local Faculty and Staff

	(a) Percentage of college staff living locally	X	(b) Percentage of income spent in district by staff living in district	X	(c) Total disposable income of college staff	X	(d) Percentage of college staff expenditures spent on nonhousing items
--	---	---	---	---	---	---	--

1.1.2.2 =

(a) = 0. (5)

(b) = 0. (9)

(c) = \$ (7)

(d) = 0. (10)

1.1.2.2 = \$

Model B-1.1.2.3 Local Expenditures by Nonlocal Faculty and Staff

	(a) Percentage of college staff not living locally	X	(b) Total of college staff years	X	(c) Estimated average of local expenditure by each nonlocal faculty and staff
--	---	---	--	---	---

1.1.2.3 =

(a) = 0. (11)

(b) = (12)

(c) = \$ (14)

1.1.2.3 = \$

Model B-1.1.2 Local Expenditures by Faculty and Staff

1.1.2 = 1.1.2.1 + 1.1.2.2 + 1.1.2.3

1.1.2.1 = \$

1.1.2.2 = \$

1.1.2.3 = \$

1.1.2 = \$

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$$1.1.3 = \left(\begin{array}{c} \text{(a)} \\ \text{Number of} \\ \text{full-time} \\ \text{students} \end{array} \times \begin{array}{c} \text{(b)} \\ \text{Average} \\ \text{expendi-} \\ \text{ture by} \\ \text{full-time} \\ \text{student} \end{array} \right) + \left(\begin{array}{c} \text{(c)} \\ \text{Number of} \\ \text{part-time} \\ \text{students} \end{array} \times \begin{array}{c} \text{(d)} \\ \text{Average} \\ \text{expenditures} \\ \text{by part-time} \\ \text{student} \end{array} \right)$$

(a) = _____ (15)*

(b) = _____ (17)

(c) = _____ (16)

(d) = _____ (18)

1.1.3 = _____ X 9 months = _____
(Total Year Expenditure)

Model B-1.1 College-Related Local Expenditures

1.1 = 1.1.1 + 1.1.2 + 1.1.3

1.1.1 = \$ _____

1.1.2 = \$ _____

1.1.3 = \$ _____

1.1 = \$ _____

Model B-1.2 Purchases from Local Sources by Local Businesses in
Support of Their College-Related Business

$$1.2 = \begin{array}{c} \text{(a)} \\ \text{Coefficient} \\ \text{representing the} \\ \text{extent businesses} \\ \text{purchase goods} \\ \text{from local sources} \end{array} \times \begin{array}{c} \text{(b)} \\ \text{College-related} \\ \text{local} \\ \text{expenditures} \end{array}$$

(a) = 0.15 Caffrey-Isaacs, Appendix B

(b) = \$ _____ Model B-1.1

1.2 = \$ _____

*Refers to numbered data in Section III-A

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Model B-1.3 Local Business Volume Stimulated by the Expenditures
of College-Related Income by Local Individuals Other
than College Staff or Students

$$\begin{aligned}
 & \text{(a)} & \text{(b)} \\
 & \text{Coefficient} & \\
 & \text{representing the} & \\
 & \text{extent individual} & \text{College-related} \\
 1.3 = & \text{income received} \quad \times \quad \text{local} \\
 & \text{from local business} & \text{expenditures} \\
 & \text{activity is spent} & \\
 & \text{and respend locally} & \\
 (a) = & \underline{0.60} & \text{Caffrey-Isaacs, Appendix B} \\
 (b) = & \$ & \text{Model B-1.1} \\
 1.3 = & \$ &
 \end{aligned}$$

Model B-1. College-Related Local Business Volume

$$\begin{aligned}
 B-1. &= 1.1 + 1.2 + 1.3 \\
 1.1 &= \$ \\
 1.2 &= \$ \\
 1.3 &= \$ \\
 B-1. &= \$
 \end{aligned}$$

Model B-2.1 Value of Local Business Real Property Committed to
College-Related Business

$$\begin{aligned}
 & \text{(a)} & \text{(b)} \\
 2.1 = & \left(\frac{\text{College-related local business volume}}{\text{Local business volume}} \right) \times \left(\frac{\text{Assessed valuation of local business real property}}{\text{Local ratio of assessed value to market value of taxable real property}} \right) \\
 = & \frac{\$}{B-1} \div \frac{\$}{(19)} \\
 (a) = & \underline{0.} \\
 = & \frac{\$}{(20)} \div \frac{0.}{(21)} \\
 (b) = & \$ \\
 2.1 = & \$
 \end{aligned}$$

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Model B-2.2 Value of Local Business Inventory Committed to
College-Related Business

$$2.2 = \frac{\text{(a) Inventory-to-business-volume ratio}}{\text{(b) College-related local business volume}} \times \text{Model B-1}$$

(a) = 0.12 Suggested by Caffrey and Isaacs

(b) = \$ Model B-1

2.2 = \$

Model B-2 Value of Local Business Property Committed to
College-Related Business Volume

B-2 = 2.1 + 2.2

2.1 =

2.2 =

B-2 =

Model B-3 Expansion of Local Banks' Credit Base Due to
College-Related Deposits

$$B-3 = (1-t) [TD_c + (TD_f)(F) + (TD_s)(S)] + (1-d) [DD_c + (DD_f)(F) + (DD_s)(S) + (cbv)(VB_{cr})]$$

B-3 = 0.90 [\$ c. +
(\$ d.) (e.) +
(\$ f.) (g.)] +
0. [j. +
(\$ k.) (e.) +
(\$ l.) (g.) +
(0.037)(m.)] =

(a) t = local time-deposit reserve requirement
= 0.10

(b) 1-t = percent of time-deposit which can be loaned out
= .90

- (c) TD_c = average time-deposit of the college in local banks
(obtained from college treasurer)
= \$ _____ (22)
- (d) TD_f = average time-deposit of each faculty and staff person in
local banks (obtain from local banks)
= \$ _____ (23)
- (e) F = total number of faculty and staff in district
= _____ (24)
- (f) TD_s = average time-deposit of each full-time student in local
banks
= \$50.00 _____
- (g) S = total number of full-time students
= _____ (15)
- (h) d = local demand-deposit reserve requirement
= 0.20 _____
- (i) $1-3$ = percent of demand-deposit which can be loaned out
= 0.80 _____
- (j) DD_c = average demand-deposit of the college in local banks (from
college records)
= \$ _____ (25)
- (k) DD_f = average demand-deposit of each college staff person in
local banks (obtain from local banks)
= \$ _____ (26)
- (l) DD_s = average demand-deposit of each student in local banks
= \$50.00 _____
- (m) BV_{cr} = college related local business volume (8-1)
= \$ _____
- (n) cbv = cash to business volume ratio (suggested by Caffrey-Isaacs
from Internal Revenue Statistics)
= 0.37 _____

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Model G-1.1.2 Real-Estate Taxes Paid to Local Government by Local Faculty and Staff

$$1.1.2 = \left(\begin{array}{c} \text{(a)} \\ \text{Number of} \\ \text{college} \\ \text{staff} \\ \text{years} \\ \text{living} \\ \text{locally} \end{array} \right) \times \left(\begin{array}{c} \text{(b)} \\ \text{Percentage} \\ \text{of local} \\ \text{staff who} \\ \text{rent} \end{array} \right) \times \left(\begin{array}{c} \text{(c)} \\ \text{Local} \\ \text{property} \\ \text{tax rate} \end{array} \right) \times \left(\begin{array}{c} \text{(d)} \\ \text{Average} \\ \text{assessed} \\ \text{value of} \\ \text{homes in} \\ \text{district} \end{array} \right)$$

(a) = _____ (24)

(b) = 0. (1) - (6)

(c) = _____ (27)

(d) = \$ _____ (30)

1.1.2 = \$ _____

Model G-1.1.4 Real-Estate Taxes Paid Local Government by Local Businesses for Real-Property Allocable to College-Related Business

$$1.1.4 = \left(\begin{array}{c} \text{(a)} \\ \text{Local} \\ \text{property} \\ \text{tax rate} \end{array} \right) \times \left(\begin{array}{c} \text{(b)} \\ \text{College-related} \\ \text{local business} \\ \text{volume} \\ \hline \text{Local business} \\ \text{volume} \end{array} \right) \times \left(\begin{array}{c} \text{(c)} \\ \text{Assessed} \\ \text{valuation of} \\ \text{local business} \\ \text{real property} \end{array} \right)$$

(a) = \$ 0. _____ (27)

= \$ _____ ÷ _____
(B-1) (19)

(b) = \$ 0. _____

(c) = \$ _____ (20)

1.1.4 = \$ _____

Model G-1.1. College-Related Real-Estate Taxes Paid to Local Governments

1.1 = 1.1.2 + 1.1.4

1.1.2 = \$ _____

1.1.4 = \$ _____

1.1 = \$ _____

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Model G-1.3 Sales Tax Revenues Received by Local Government as a Result of College-Related Local Purchases

$$1.3 = \left(\begin{array}{c} \text{(a)} \\ \text{Sales tax returned} \\ \text{to local governments} \end{array} \right) \times \left(\begin{array}{c} \text{(b)} \\ \text{College-related local} \\ \text{business volume} \\ \hline \text{Local business volume} \end{array} \right)$$

(a) = \$ _____ (28)

(b) = 0. _____ Obtain from (b) of G-1.1.4

1.3 = \$ _____

Model G-1.4.1 State Aid to Local Public Schools Allocable to Children of College-Related Families

$$1.3 = \left(\begin{array}{c} \text{(a)} \\ \text{Federal and state} \\ \text{aid to local public} \\ \text{schools} \end{array} \right) \times \left(\begin{array}{c} \text{(b)} \\ \text{Number of college staff} \\ \text{children attending local} \\ \text{public schools} \\ \hline \text{Total number of children} \\ \text{attending local public} \\ \text{schools} \end{array} \right)$$

(a) = \$ _____ (29)

= \$ _____ (31) ÷ _____ (33)

(b) = 0. _____

1.4.1 = \$ _____

Model G-1.4.2 Other State Aid Received by Local Government on a Per Capital, Service-Unit or Tax Unit Basis and Influenced by the Presence of the College, e.g., Gasoline Tax and Income Tax Allocations

$$1.4.2 = \left(\begin{array}{c} \text{(a)} \\ \text{Amount of fuel} \\ \text{tax and income} \\ \text{tax returned} \end{array} \right) \times \left(\begin{array}{c} \text{(b)} \\ \text{Total people in} \\ \text{college staff} \\ \text{households} \\ \hline \text{Population of} \\ \text{District} \end{array} \right)$$

(a) = \$ _____ (34) + (35)

(b) = _____ (36) ÷ _____ (37) = 0. _____

1.4.2 = \$ _____

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$$1.4 = 1.4.1 + 1.4.2$$

1.4.1 = \$

1.4.2 = \$

1.4 = \$

$$G-1 = 1.1 + 1.3 + 1.4$$

1.1 = \$

1.3 = \$

1.4 = \$

G-1. = \$

$$2.1 = \left(\begin{array}{c} \text{(a)} \\ \text{Local government's} \\ \text{operating budgets} \\ \text{for all municipal} \\ \text{services except} \\ \text{public schools} \end{array} \right) \times \left(\begin{array}{c} \text{(b)} \\ \text{Total number of persons} \\ \text{in local college staff} \\ \text{homes} \\ \hline \text{Total local resident} \\ \text{population} \end{array} \right)$$
$$(a) = \$ \quad (32)$$

(b) = 0. obtain from (b) in G-1.4.2

2.1 = \$

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Model G-2.2 Operating Costs of Local Public Schools Allocable to
College-Related Persons

$$2.2 = \left(\begin{array}{c} \text{(a)} \\ \text{Local operating} \\ \text{budget for public} \\ \text{schools} \end{array} \right) \times \left(\begin{array}{c} \text{(b)} \\ \text{Number of college staff} \\ \text{children attending public} \\ \text{schools} \\ \hline \text{Total number of students} \\ \text{attending local public} \\ \text{schools} \end{array} \right)$$

(a) = \$ _____ (38)

(b) = 0. _____ obtain from (b) G-1.4.1
(31)

2.2 = \$ _____

Model G-2 Operating Costs of Local Government-Provided Municipal
and Public School Services Allocable to
College-Related Influences

G-2 = 2.1 + 2.2

2.1 = \$ _____

2.2 = \$ _____

G-2 = \$ _____

Model I-1 Number of Local Jobs Attributable to the Presence of
the College

$$I-1 = \left(\begin{array}{c} \text{(a)} \\ \text{Total} \\ \text{number} \\ \text{of} \\ \text{college} \\ \text{staff} \end{array} + \left[\begin{array}{c} \text{(b)} \\ \text{Full-time} \\ \text{jobs per} \\ \text{dollar of} \\ \text{direct} \\ \text{expenditure} \\ \text{locally} \end{array} \right] \times \left[\begin{array}{c} \text{(c)} \\ \text{College-} \\ \text{related} \\ \text{local} \\ \text{expendi-} \\ \text{ture} \end{array} + \begin{array}{c} \text{(d)} \\ \text{Operating cost} \\ \text{of government} \\ \text{provided muni-} \\ \text{cipal and public} \\ \text{school services} \\ \text{allocable to} \\ \text{college-related} \\ \text{influences} \end{array} \right] \right)$$

(a) = _____ (12)

(b) = 0.00007 _____ Recommended by Caffrey and Isaacs

(c) = \$ _____ Obtain from Model B-1.1

(d) = \$ _____ (G-2)

I-1 = _____

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Model I-2 Personal Income of Local Individuals from College Jobs
and Businesses

$$I-2 = \left(\begin{array}{c} (a) \\ \text{Percentage} \\ \text{of college} \\ \text{staff} \\ \text{residing} \\ \text{locally} \end{array} \times \begin{array}{c} (b) \\ \text{Gross} \\ \text{compensation} \\ \text{to faculty} \\ \text{and staff} \end{array} \right) + \left[\begin{array}{c} (c) \\ \text{Payrolls} \\ \text{and profits} \\ \text{per dollar} \\ \text{of local} \\ \text{direct ex-} \\ \text{penditures} \end{array} \right] \left(\begin{array}{c} (d) \\ \text{College} \\ \text{related} \\ \text{local} \\ \text{expendi-} \\ \text{tures} \end{array} \right)$$

(a) = _____ (5)

(b) = \$ _____ (3)

(c) = \$.55 _____ Recommended by Caffrey and Isaacs

(d) = \$ _____ Obtain from Model B-1.1

I-2 = \$ _____

Additional Funds from Government*

1. Restricted funds not in regular budget	\$ _____	(39)
2. Amount paid to veterans	\$ _____	(40)
3. Amount paid to Social Security recipients	\$ _____	(41)
Total	\$ _____	

*This section is optional and may be eliminated if data is difficult to obtain.

Section V

Summary Information

V-A The Concept of the Multiplier

(The following is taken from Caffrey-Isaacs, Page 45)

The concept of the multiplier is an important element in the equation systems presented in this Handbook. Although different multipliers are used (for example, an income multiplier and an employment multiplier), the general concept of a multiplier is the same.

For example, consider the income multiplier. Approximately 35 cents of a dollar spent in local business establishments by community residents is returned to the spenders as income. The balance, approximately 65 cents, is spent by local business establishments for materials and supplies from other local enterprises (including local taxes) or for goods and services produced outside the community (including nonlocal taxes). But this is only the first round of transactions. The income accruing to local residents from this initial round is partially respent in the local business community. (Some is saved; some is paid out in taxes and fees to federal, state, and local governments; and some is spent outside the community.) Again, on the average, 35 cents of the dollar spent locally is returned in the form of income. This recycling process continues with diminishing increments at each stage. Eventually, income received by local residents from the initial dollar spent totals approximately 66 cents. The ratio of total income, 66 cents, to the initial income received, 35 cents, is almost two to one, 1.9:1.0.

Since it measures the multiple impact of an initial income stimulus, 1.9 is called the income multiplier. The concept is useful in demonstrating the various repercussions of direct stimuli, such as the described consumer spending and income. Similar indirect effects are carried over to local employment and to transactions between local business establishments.

The magnitude of any multiplier-income, employment, etc. varies among localities at any point in time, as well as over a period of time for any one locality. It must be emphasized that the multiplier effects can only be statistically estimated, not traced directly. The local variation of statistical estimates, notwithstanding data errors and estimating errors, can spring from such factors as the relative dependence of a community on goods and services produced elsewhere, i.e., imports; the spending and saving preferences of the local residents; the number and demographic characteristics of the residents; the patterns of consumer spending; and the industrial and commercial structure of economic activity.

The differential effects of the above factors, plus others not listed, on employment multipliers are indicated in the following multiplier estimates:¹

¹Steven Weiss and Edwin Gooding, "Estimation of Differential Multipliers in Small Regional Economy," Research Report to the Federal Reserve Bank of Boston No. 37 (Boston, 1966) p. 38.

1. Individual states (income units)-2.5-3.0 (average)
2. Lancaster County, Nebraska-2.3
3. Los Angeles County, California-2.2
4. Wichita, Kansas-2.0
5. Portsmouth-Dover area, New Hampshire (multiplier based on Pease Air Force Base expenditures only)-1.2-1.4
6. Hawaii-1.3
7. Ayer, Massachusetts (small town, semirural, large military installation)-1.2

It is important to note that the size of the employment multiplier shown above is, broadly speaking, directly related to the size of the geographic unit covered, the diversity of its industrial and commercial activities, and the magnitude of its population. (Hawaii, because of its great dependence on the mainland and because of military expenditures, departs from the general rule.)

The range of the employment multiplier estimated for the college impact study presented here, 1.2-1.5, falls within the general range shown and is consistent with ranges for areas of lesser diversity, size, and impact dependence. One may generalize about both specific applications of this multiplier and the income and other multipliers presented in this Handbook. The multipliers presented here are based on an area of approximately 50,000 persons (including the student population), with employment in manufacturing averaging about 4% and in services and trade (including government and educational institutions) about 55 percent, respectively, of total employment in the community. For specific applications, as the employment distribution and population approaches such figures and as the community lives more on its own enterprises, the upper range of the multiplier should be used. Where the community is smaller, less diverse in employment, and more dependent on imports, the lower end of the range should be used.

V-B Percentage of Each County by Community College District (Based on Population)

Dist. No.	College County	Percent in District	Dist. No.	College County	Percent in District
501	Kaskaskia		502	DuPage	
	Bond	92.48		Cook	2.16
	Clinton	100.00		DuPage	99.03
	Fayette	44.67		Will	0.41
	Jefferson	3.76		Total	10.70
	Madison	0.26			
	Marion	100.00			
	Montgomery	0.76			
	Washington	92.40			
	Total	24.96			
503	Black Hawk		504	Triton	
	Bureau	4.00		Cook	6.88
	Henderson	1.91			
	Henry	99.57			
	Knox	1.29			
	Mercer	93.07			
	Rock Island	100.00			
	Stark	78.40			
	Whiteside	6.09			
	Total	59.98			
505	Parkland		506	Sauk Valley	
	Champaign	99.34		Bureau	8.97
	Coles	0.82		Carroll	28.11
	DeWitt	22.85		Henry	0.27
	Douglas	82.62		Lee	88.10
	Edgar	00.38		Ogle	12.85
	Ford	93.38		Whiteside	93.91
	Iroquois	18.80		Total	41.60
	Livingston	7.15			
	McLean	5.94			
	Moultrie	5.08			
	Piatte	85.25			
	Vermilion	0.78			
	Total	37.71			
507	Danville		508	Chicago	
	Champaign	0.66		Cook	57.72
	Edgar	19.06			
	Ford	0.06			
	Iroquois	13.00			
	Vermilion	99.22			
	Total	32.21			

Dist. No.	College County	Percent in District	Dist. No.	College County	Percent in District
509	Elgin		510	Thornton	
	Cook	0.90		Cook	5.21
	DeKalb	0.05			
	DuPage	0.97			
	Kane	47.33			
	McHenry	8.43			
	Total	2.96			
511	Rock Valley		512	Wm. R. Harper	
	Boone	98.94		Cook	7.06
	DeKalb	0.22		Kane	1.97
	McHenry	0.01		Lake	2.81
	Ogle	28.93		McHenry	0.90
	Stephenson	0.96		Total	6.44
	Winnebago	99.99			
	Total	50.81			
513	Illinois Valley		514	Illinois Central	
	Bureau	70.75		Bureau	0.06
	DeKalb	0.23		Livingston	6.76
	Grundy	0.97		McLean	0.32
	LaSalle	97.25		Marshall	67.51
	Lee	3.90		Mason	20.21
	Marshall	30.55		Peoria	100.00
	Putnam	100.00		Tazewell	95.24
	Total	48.04		Woodford	88.21
				Total	62.34
515	Prairie State		516	Waubonsee	
	Cook	3.05		DeKalb	16.38
	Will	10.18		Kane	50.60
	Total	3.42		Kendall	84.69
				LaSalle	2.34
				Will	0.17
				Total	22.54

Dist. No.	College County	Percent in District	Dist. No.	College County	Percent in District
517	Lake Land		518	Carl Sandburg	
	Christian	21.73		Fulton	3.63
	Clark	97.08		Hancock	89.70
	Clay	10.51		Henderson	98.09
	Coles	99.18		Henry	0.15
	Cumberland	100.00		Knox	98.59
	Douglas	17.00		McDonough	34.21
	Edgar	35.26		Mercer	6.93
	Effingham	100.00		Schyler	1.99
	Fayette	55.33		Stark	0.18
	Jasper	8.69		Warren	100.00
	Macon	0.04			
	Montgomery	0.44		Total	44.43
	Moultrie	94.92			
	Shelby	87.12			
	Total	35.72			
519	Highland		520	Kankakee	
	Carroll	71.89		Ford	6.56
	Jo Davies	55.37		Grundy	0.32
	Ogle	26.41		Iroquois	51.45
	Stephenson	99.04		Kankakee	99.94
				Livingston	6.53
	Total	64.13		Will	0.09
				Total	23.02
521	Rend Lake		522	Belleville	
	Franklin	71.38		Bond	4.58
	Hamilton	93.31		Madison	45.29
	Jefferson	96.24		Monroe	100.
	Perry	48.87		Montgomery	0.05
	Washington	0.03		Perry	0.57
	Wayne	21.43		Randolph	95.89
	White	9.21		St. Clair	74.53
	Williamson	0.13		Washington	7.63
	Total	41.65		Total	56.53
523	Kishwaukee		524	Moraine	
	Boone	0.7		Cook	5.87
	DeKalb	83.12			
	Kane	.08			
	LaSalle	.01			
	Lee	7.99			
	Ogle	31.81			
	Winnebago	.01			
	Total	9.57			

Dist. No.	College County	Percent in District	Dist. No.	College County	Percent in District
525	Joliet		526	Lincoln Land	
	Cook	0.14		Bond	2.94
	Grundy	98.70		Cass	93.08
	Kankakee	0.06		Christian	65.37
	Kendall	15.31		DeWitt	0.14
	LaSalle	0.40		Logan	13.56
	Livingston	17.66		Macon	0.005
	Will	87.33		Macoupin	28.28
	Total	5.13		Mason	20.72
				Montgomery	98.75
				Morton	13.7
				Menard	100.00
				Sangamon	99.05
				Total	49.48
527	Morton		528	McHenry	
	Cook	2.27		Boone	0.36
				Kane	0.027
				Lake	0.28
				McHenry	90.67
				Total	14.05
529	Illinois Eastern		530	John A. Logan	
	Clark	2.92		Franklin	28.62
	Clay	89.49		Jackson	97.89
	Crawford	97.87		Perry	50.56
	Edwards	100.00		Randolph	4.11
	Hamilton	0.75		Williamson	99.02
	Jasper	91.31		Total	62.83
	Lawrence	49.25			
	Richland	100.00			
	Wabash	100.00			
	Wayne	78.57			
	White	21.95			
	Total	43.84			
531	Shawnee		532	Lake County	
	Alexander	100.00		Lake	92.16
	Jackson	2.11			
	Johnson	86.36			
	Massac	100.00			
	Pulaski	100.00			
	Union	100.00			
	Total	52.26			

Dist. No.	College County	Percent in District	Dist. No.	College County	Percent in District
533	Southeastern		534	Spoon River	
	Gallatin	100.00		Fulton	96.36
	Hamilton	5.93		Knox	0.13
	Hardin	100.00		McDonough	65.79
	Johnson	13.65		Mason	35.76
	Pope	100.00		Schuyler	93.17
	Saline	100.00			
	White	68.83		Total	47.95
	Williamson	0.34			
	Total	44.00			
535	Oakton		536	Lewis & Clark	
	Cook	7.32		Calhoun	87.48
				Greene	100.00
				Jersey	100.00
				Macoupin	71.72
				Madison	54.46
				Total	62.25
537	Richland		539	John Wood	
	Christian	12.89		Adams	100.00
	Dewitt	62.86		Calhoun	12.52
	Logan	1.73		Hancock	10.30
	Macon	99.96		Pike	98.90
	Piatte	14.75		Schuyler	4.84
	Sangamon	0.95			
	Shelby	12.88		Total	74.13
	Total	35.33			
601	SCC, East St. Louis				
	St. Clair	25.47			

Summary

The economic impacts of a college on its district are varied and complex, and the interpretation of the impacts as revealed by this model should receive careful consideration. The model, developed for the express purpose of measuring economic impact of colleges and universities, has been tested and validated by use in earlier research. In this model the researcher should use the most cautious figures in calculating the impacts.

Dollar amounts should be used as defined by the models. It would be erroneous and misleading to combine any of the figures or try to arrive at a total dollar figure. Each model represents a different kind of impact. Therefore, any representation should keep the models separated and should be interpreted within the limits of each model's definition.

This type of impact analysis determines the economic benefits of a community college, but in no way the educational and social benefits obtained from a community college.

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ERIC Clearinghouse for Junior Colleges
8118 Math-Sciences Building
University of California
Los Angeles, California 90024

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